

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,770	05/03/2001	Michael T. Loos	26625-704	6636
21971	7590	07/13/2004	EXAMINER	
WILSON SONSINI GOODRICH & ROSATI			RUTTEN, JAMES D	
650 PAGE MILL ROAD			ART UNIT	
PALO ALTO, CA 943041050			PAPER NUMBER	
			2122	

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/848,770

Applicant(s)

LOOS ET AL.

Examiner

J. Derek Rutten

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/23/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-26 have been examined.

#### *Drawings*

2. The drawings are objected to because Figures 11 and 14 contain grayscale images that will not produce satisfactory reproduction. See MPEP 608.02 and 37 CFR 1.84(l) and 1.84(m). Further, Figures 1-4, 11-13, 15 and 16 contain text that is less than 1/8" inch in height. See MPEP 608.02 and 37 CFR 1.84(p). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-4, 6, 7, 9, 10, 17, and 18-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 09/848,970 (hereinafter referred to as "the '970 application").

Although the conflicting claims are not identical, they are not patentably distinct from each other. For example:

In comparison with claim 1, claim 1 of the '970 application discloses:

*A method (page 39 line 3) for use of a software application, the method comprising:*  
*accessing a mobile data model, at least a portion of the mobile data model suitable to be instantiated at a distributed device to create a mobile data store containing enterprise information on the distributed device (page 39 lines 5 and 6: "creating a data model, the data model associated with at least one of a plurality of back-end applications of the enterprise computing system"; also page 39 lines 8 and 9: "deploying at least a*

Art Unit: 2122

portion of the software application and at least **a portion of the data model to a mobile computing device.**" A mobile data store is inherent since an abstract data model must be represented on the mobile computing device in some way in order for the application to use it.);

*creating a mobile software application to be executed at the distributed device and to interact with the mobile data store* (page 39 line 7: "creating a software application that uses the data model"; As described above, the mobile data store is inherent in use of the data model.); *and*

*making the mobile software application and at least a portion of the mobile data model available to a consumer* (page 39 lines 8 and 9: "deploying at least a portion of the software application and at least a portion of the data model to a mobile computing device.").

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1-3, and 7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, and 13 of copending Application No. 09/848,952 (hereinafter referred to as "the '952 application"). Although the conflicting claims are not identical, they are not patentably distinct from each other. For example:

Regarding claim 1, claims 1 and 6 of the '952 application discloses:

*A method (page 39 line 3) for use of a software application, the method comprising:*

*accessing a mobile data model, at least a portion of the mobile data model suitable to be instantiated at a distributed device to create a mobile data store containing enterprise information on the distributed device (page 39 lines 9 and 10: “wherein the software platform further includes a deployment feature allowing deployment of at least a portion of the data model to a plurality of **mobile computing devices**”; also lines 20 and 21: “creation of a software application that **references** the **data model**”; A mobile data store is inherent since the data model must be present on the mobile computing device in order for the application to function.);*

*creating a mobile software application to be executed at the distributed device and to interact with the mobile data store (page 39 lines 20 and 21 as cited above); and*

*making the mobile software application and at least a portion of the mobile data model available to a consumer (page 39 lines 9 and 10 as cited above).*

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-3 and 6-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5, 6, and 11 of copending Application No. 09/848,769 (hereinafter referred to as “the ‘769 application”).

Art Unit: 2122

Although the conflicting claims are not identical, they are not patentably distinct from each other because for example:

Regarding claim 1, claim 1 of the '769 application discloses:

*A method (page 41 line 3) for use of a software application, the method comprising:*

*accessing a mobile data model, at least a portion of the mobile data model suitable to be instantiated at a distributed device to create a mobile data store containing enterprise information on the distributed device (page 41 lines 5 and 6: "creating a domain data store comprised of **data relating to an enterprise** system; establishing a communication link with a **mobile computing device**, the mobile computing device including a **mobile data store** comprised of at least a portion of the data"; A mobile data model is inherent since the data store is an implementation of the model.);*

*creating a mobile software application to be executed at the distributed device and to interact with the mobile data store (page 41 lines 7-9: "receiving transactions from the mobile computing device, the transactions comprising at least partially **data operations performed** on the mobile data store prior to the communication link being established" Creation of the application is*



Art Unit: 2122

inherent since data operations performed on the mobile data store must be executed using an application.); *and*

*making the mobile software application and at least a portion of the mobile data model available to a consumer (page 41 lines 7-9 as cited above).*

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. The term "similar" in claim 10 is a relative term which renders the claim indefinite. The term "similar" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. As such, it is not clear what job descriptions would be judged to be similar. For the purposes of further examination, this limitation has been interpreted to refer to --a group of mobile workers sharing a description--.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,857,201 to Wright et al. (hereinafter referred to as "Wright").

As per claim 1, Wright discloses:

*A method for use of a software application* (column 13 line 1 – column 14 line 15), *the method comprising:*

*accessing a mobile data model, at least a portion of the mobile data model suitable to be instantiated at a distributed device to create a mobile data store containing enterprise information on the distributed device* (column 2 lines 24-26: "The client/server (C/S) architecture of the present invention is designed to allow the client to become a **direct extension of the corporate data sources.**"; also column 2 lines 50-58: "...in a computer network, including a server, a data source, and a mobile client having a database, a method of synchronizing the client database and data source during a non-persistent connection, the method comprising the steps of connecting the mobile client to the server; manipulating

Art Unit: 2122

the **client database** by the server; updating the **data source** responsive to the manipulation by the server; and disconnecting the client from the server.");

*creating a mobile software application to be executed at the distributed device and to interact with the mobile data store* (column 2 lines 34-38: "Applications built with existing development tools can be enabled to either **exchange data** on demand, or provide facilities for a multi-port server allowing remote database access and e-mail access from the field."); *and*

*making the mobile software application and at least a portion of the mobile data model available to a consumer* (In Wright, a consumer can be considered a PDA, which functions as the client in the client/server architecture disclosed. As such, the application and data model are inherent to the function of the system, since without availability to them, the system loses its primary functionality.).

As per claim 2, the above rejection of claim 1 is incorporated. Wright further discloses: *wherein the consumer comprises a distributed computing device* (column 2 lines 38-42).

As per claim 3, the above rejection of claim 1 is incorporated. Wright further discloses: *initiating deployment of the mobile software application and the at least a*

Art Unit: 2122

*portion of the mobile data model to a plurality of distributed computing devices (column 2 lines 32-34).*

As per claim 4, the above rejection of claim 1 is incorporated. Wright further discloses: *using the mobile data model to create a domain data store in a middle tier server (column 2 lines 56-57).*

As per claim 5, the above rejection of claim 1 is incorporated. Wright further discloses: *wherein a first consumer receiving the mobile software application can access and update data instances in the domain data store using the at least a portion of the mobile data model (column 4 lines 38-49).*

As per claim 6, the above rejection of claim 1 is incorporated. Wright further discloses: *wirelessly deploying the mobile software application to a first consumer (column 5 lines 40-41; also column 4 lines 2-4; also column 11 lines 16-17).*

As per claim 7, the above rejection of claim 1 is incorporated. Wright further discloses: *developing a distribution rule that identifies a group of consumers; and initiating deployment of the mobile software application to the group of consumers (column 11 lines 10-17).*

Art Unit: 2122

As per claim 8, the above rejection of claim 1 is incorporated. All further limitations have been addressed in the above rejections of claims 3, 4, and 5.

As per claim 9, the above rejection of claim 1 is incorporated. All further limitations have been addressed in the above rejections of claims 2, 3, and 6.

As per claim 10, the above rejection of claim 9 is incorporated. Wright further discloses: *wherein the first consumer comprises a group of mobile workers sharing a description* (column 4 lines 17-21).

As per claim 11, Wright discloses:

*A system for application development in a mobile domain* (Figure 2), comprising:  
*a middle tier server; a domain data store maintained in the middle tier server, the domain data store representing enterprise information maintained in an enterprise back end* (column 6 lines 27-33: "The FormLogic Server 132 serves as a "gateway" between FormLogic Clients (e.g., 136, 142, 146) and **enterprise data sources** (e.g., 180, 182). The server 132 supports what is known as a multi-tier client/server model in that it creates an **intermediate server** between the client and the "traditional" or "original" server."; also column 7 lines 45-64: "A service defines the relationship between a client application and an enterprise data source. Examples

Art Unit: 2122

of services include Mail, World Wide Web Gateway, or Inventory... The **service instantiations** can be considered as **interfaces** between the "master" service and the connection."

Comment: Here, the service instantiations represent enterprise information maintained in an enterprise back end, and as such can be interpreted as domain data stores within the middle tier server.);

*an application development engine operable to generate instructions that can be deployed to the distributed computing platform and that allow the distributed computing platform to access information within the mobile data store* (column 4 lines 2-4:

"Complete Software Distribution interface allowing developers to programmatically install FormLogic forms, agents and tables during connections"; also column 4 lines 41-43:

"This allows portions of databases to be carried into the field where they can be modified and later **synchronized** with the server database."; also column 5 lines 16-17: "The FL client 136 includes an FL **Engine** 160 which allows FormLogic applications to execute on a variety of handheld devices").

All further limitations have been addressed in the above rejection of claim 1.

As per claim 12, the above rejection of claim 11 is incorporated. Wright further discloses: *wherein the application development engine is operable to generate object*

*oriented instructions* (column 5 lines 33-36, referencing U.S. Pat. 5,704,029 [incorrectly listed as 5,204,029], shows inherent use of the Newton Script object-oriented language.).

As per claim 13, the above rejection of claim 11 is incorporated. Wright further discloses: *further comprising a graphical user interface (GUI) engine responsive to the application development engine* (column 5 lines 30-33).

As per claim 14, the above rejection of claim 11 is incorporated. Wright further discloses: *a mobile data modeler operable to access the mobile data model* (column 5 lines 33-36: "script engine"); *and*

*a graphical user interface (GUI) engine operable to present a developer with an interface for the mobile data modeler to modify the mobile data model* (column 5 lines 33-36: "user interface").

As per claim 15, the above rejection of claim 11 is incorporated. Wright further discloses: *further comprising an enterprise back end system maintaining the enterprise information* (column 4 lines 65-67).

As per claim 16, the above rejection of claim 11 is incorporated. All further limitations have been addressed in the above rejection of claim 6.

As per claim 17, Wright discloses: *a memory associated with the distributed computing platform, the memory storing a mobile data store comprising information indicative of information in an enterprise backend* (column 5 lines 18-20: The Apple MessagePad Model 120 inherently comprises memory). All further limitations have been addressed in the above rejections of claims 1 and 11.

As per claim 18, the above rejection of claim 17 is incorporated. All further limitations have been addressed in the above rejection of claim 1.

As per claim 19, the above rejection of claim 18 is incorporated. Wright further discloses: *wherein the mobile application comprises user task specific routines* (column 6 lines 46-59).

As per claim 20, the above rejection of claim 18 is incorporated. Wright further discloses: *wherein the mobile application comprises user specific routines* (column 7 lines 45-53).

As per claim 21, the above rejection of claim 20 is incorporated. Wright further discloses: *wherein the user specific routines are specific to a first user of the distributed computing platform, the system further comprising: a second mobile application that comprises a second set of specific routines for a second user of the distributed computing platform* (column 10 line 66 – column 12 line 19).



As per claim 22, Wright discloses: *establishing a first communication link with a mobile computing device; disconnecting the first communication link; establishing a second communication link with the mobile computing device; and receiving transaction data across the second communication link, the transaction data resulting from execution of the client-side application by the mobile computing device at least a portion of the execution occurring after disconnecting the first communication link and before establishing the second communication link* (column 5 lines 52-58: "Upon connection, this local database 172 is automatically manipulated by the FL server 132. The FL server 132 can query the client database 172, add data to the client database, or remove data from the client database in order **make updates** to both the client and server databases to reflect **changes** that have happened on both sides **since the last connection.**"). All further limitations have been addressed in the above rejection of claim 1.

As per claim 23, the above rejection of claim 22 is incorporated. Wright further discloses: *deriving a first mobile data model from an enterprise information system; and modifying the first mobile data model to yield the deployable mobile data model* (column 4 lines 38-43).

As per claim 24, Wright discloses:

*A method for application development and deployment* (column 6 lines 34-38:

"The FL Builder (not shown) is a development tool, previously described in applicant's copending patent application, now U.S. Pat. No. 5,704,029, used to build FormLogic applications that can be executed on a variety of hardware platforms."), *the method comprising:*

*developing a mobile data model; adding at least a portion of the mobile data model to a package* (Developing a mobile data model is inherent to adding it to a package, otherwise there would be nothing to add; column 6 lines 63-64:

"Communications agents, also just known as "**agents**", are developed to describe the communications "**session**".

Communications agents know how to connect to a particular host, perform a **set of operations** or tasks, which usually includes **synchronizing the host data source**, e.g., 180, with the client database 172, and then disconnecting. The idea is that a developer can create a communications agent that represents each of the communications sessions that a field user may need." Here, the mobile data model is evidenced by the set of operations that make up an agent. An agent here is considered to be equivalent to a package. In order for the agent to operate on the host data source, it must inherently use a

Art Unit: 2122

data model, otherwise it would not be able to find or distinguish the data contained therein. );

*including the package in a mobile user application* (column 7 lines 21-23: "An exemplary Session1 200 called Daily Connect includes three tasks: Task1 204, e.g., GetMail; Task2 206, e.g., SendMail; and Task3 208, e.g., UpdateInventory."); *and*

*deploying the mobile user application to a distributed computing device* (column 4 lines 2-4 as cited above in the rejection of claim 11).

As per claim 25, the above rejection of claim 24 is incorporated. Wright further discloses: *including at least an integration portion of the mobile data model in an application comprising an integration component* (column 6 lines 49-56; An integration component is inherent to a the "retrieve work order" session described in this passage. Without an integration component, a new work order would not be able to be examined.).

As per claim 26, the above rejection of claim 24 is incorporated. Wright further discloses: *wherein the mobile user application is operable to colonize the distributed computing device and initiate the instantiation of a data store on the distributed computing device, the instantiation described by the at least a portion of the mobile data model added to the package* (column 4 lines 38-43).

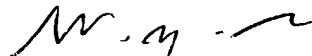
Art Unit: 2122

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (703) 605-5233. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**WEI Y. ZHEN**  
**PRIMARY PATENT EXAMINER**

jdr